

The Mediating Role of Purchase Intention on Green Skincare Purchase Behavior

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Histori Artikel:

Dikirim 12 Maret 2026; Diterima dalam bentuk revisi 10 April 2026; Diterima 20 April 2026; Diterbitkan 1 Juni 2026. Semua hak dilindungi oleh Lembaga Otonom Lembaga Informasi dan Riset Indonesia (KITA INFO dan Riset) – Lembaga KITA.

Suggested citation:

Fauzia, A. R., & Istanti, F. (2026). The Mediating Role of Purchase Intention on Green Skincare Purchase Behavior. *JEMSI (Jurnal Ekonomi, Manajemen, Dan Akuntansi)*, 12(3), 3058-3070. <https://doi.org/10.35870/jemsi.v12i3.6795>.

Abstrak

Industri skincare Indonesia berkembang cepat dan makin terhubung dengan gaya hidup konsumen, namun peningkatan konsumsi ini juga memunculkan isu lingkungan sehingga mendorong hadirnya produk green skincare sebagai alternatif yang lebih berkelanjutan; meski demikian, ketertarikan pada produk ramah lingkungan tidak selalu berujung pada pembelian nyata. Penelitian ini bertujuan menganalisis pengaruh product knowledge dan environmental concern terhadap purchase intention serta dampaknya terhadap purchase behavior produk green skincare lokal, dengan purchase intention sebagai variabel mediasi. Penelitian ini menggunakan pendekatan kuantitatif melalui survei terhadap pengguna skincare di Kota Semarang sebagai populasi penelitian, dengan teknik purposive sampling terhadap 180 responden yang memenuhi kriteria konsumen skincare. Data dianalisis menggunakan metode SEM-PLS. Hasil penelitian menunjukkan bahwa product knowledge dan environmental concern berpengaruh signifikan terhadap purchase intention, purchase intention dan environmental concern berpengaruh signifikan terhadap purchase behavior, sedangkan product knowledge tidak berpengaruh langsung terhadap purchase behavior; selain itu, purchase intention memediasi pengaruh product knowledge dan environmental concern terhadap purchase behavior.

Kata Kunci: Product Knowledge; Environmental Concern; Purchase Intention; Purchase Behavior; Green Skincare.

Abstract

The skincare sector in Indonesia has experienced swift growth and has become an integral part of consumers' daily routines. This upward trend in usage has brought about concerns for the environment, prompting the introduction of green skincare options as a more sustainable choice. Even with this transition, enthusiasm for green products does not necessarily translate into corresponding purchase action. This study aims to examine the influence of product knowledge and environmental awareness influence purchase intentions and their effects on the purchase behavior regarding local green skincare items, treating purchase intention as a mediating factor. This study uses a quantitative approach through a survey of skincare users in Semarang City as the research population, with purposive sampling techniques applied to 180 respondents who meet the criteria of skincare consumers. The data is analyzed using SEM-PLS method. The findings indicate that both product knowledge and environmental concern significantly influence purchase intention, while purchase intention and environmental concern play a significant role in influencing purchase behavior. However, there is no direct influence of product knowledge on purchasing actions. Additionally, purchase intention serves as a mediator in the connections between product knowledge and purchase behavior, as well as between environmental concern and purchase behavior.

Keyword: Product Knowledge; Environmental Concern; Purchase Intention; Purchase Behavior; Green Skincare.

1. Introduction

The expansion of the beauty and personal care market in Indonesia has demonstrated significant advancement in recent years. The overall value of the national beauty market stands around Rp35.6 trillion, with a yearly estimated growth rate of 4.73%, placing this sector among the most rapidly expanding fields in the consumer products segment (Kementrian Koordinator Bidang Perekonomian, 2025). Industry reports further indicate that skincare accounts for the largest market share in Indonesia's beauty and personal care sector, contributing more than 35% of total sales (Ken Research, 2025). Skincare has become increasingly integrated into people's daily self-care practices, where product use is no longer purely functional but also reflects lifestyle choices. Alongside this growth, rising consumption of skincare products has also contributed to the increasing volume of single-use plastic packaging waste, posing significant challenges to environmental sustainability. Data from SIPSN (2025), indicate that total waste generation in Indonesia reached approximately 21.6 million tons in 2025, with nearly 20% consisting of plastic waste. Of the total waste produced, only around 35% is properly managed. Beyond packaging concerns, the chemical composition of certain cosmetic and skincare products also presents environmental risks, as long term exposure to chemical substances contributes to greenhouse gas emissions and ozone depletion (Rumandi, 2025). These issues have attracted increasing attention as sustainability awareness rises, prompting manufacturers to adopt more environmentally friendly product strategies. The transition to environmentally friendly items is evident in the rise of sustainable skincare. Green skincare represents a transformation within the cosmetics industry that emphasizes the use of natural ingredients and sustainability values in response to shifting consumer preferences, and is perceived to offer a higher level of safety compared to synthetic products (Kumar *et al.*, 2021). This shift signals a broader transformation in the cosmetic market landscape, where environmentally conscious consumers demonstrate a greater willingness to support sustainability-oriented initiatives (Beatrice & Sidharta, 2025). As a result, green skincare has gradually progressed from a niche category to a strategic component of contemporary beauty product innovation. The growing availability of environmentally friendly products and heightened consumer awareness do not necessarily translate into actual purchasing decisions (Zhuo *et al.*, 2022). This suggests that favorable attitudes toward environmentally friendly products must be converted into concrete purchasing behavior to reflect the realization of consumers' sustainability values.

Purchase behavior represents consumers' actual decisions to select and buy products following a sequence of evaluative stages (Febrianti *et al.*, 2025; J. Wang *et al.*, 2021). Purchasing choices typically involve more careful consideration, as they are closely associated with perceptions of safety, product efficacy, and trust in brand claims (Budiasih *et al.*, 2024). Prior studies further indicate that for high-involvement products such as skincare, purchasing behavior tends to be more selective, given that consumers assess the potential risks related to long-term use (Dhir *et al.*, 2021). The growth of environmentally conscious skincare introduces another dimension for evaluation, because consumers are currently concentrating not just upon the functional attributes but additionally upon aspects linked to long term viability and the broader environmental impacts stemming from the items they choose. The purchase behaviour of environmentally friendly products is influenced not only by pro-environmental attitudes but also by cognitive factors and values that shape how consumers evaluate products (Mamun *et al.*, 2020). Research by Tengli & Srinivasan (2022) shows that product knowledge has a positive effect on purchase intention. This finding is supported by previous studies (Jafar *et al.*, 2023; Patak *et al.*, 2021; S. Wang *et al.*, 2020), which indicate that higher levels of product knowledge enhance consumers' confidence and increase purchase intention. In addition, environmental concern also influences purchase intention. A study by Mamun *et al.* (2020) demonstrates that environmental concern has a positive effect on purchase intention. This result is consistent with the findings of (Dutta & Hwang, 2021; Moslehpour *et al.*, 2023), who report that environmental concern positively contributes to increasing consumers' intention to purchase sustainable products. Empirical evidence further indicates that product knowledge has a positive effect on purchase behaviour. Tengli & Srinivasan (2022) found that the knowledge that consumers possess regarding the features and advantages of products greatly enhances the chances of them making

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a purchase.. This result is reinforced by studies conducted by (Davis & Dabas, 2021; Ezeobi *et al.*, 2025), which confirm that consumers with higher levels of product knowledge are more likely to translate their understanding into actual purchasing actions. Mamun *et al.* (2020) also identified that environmental concern has a positive effect on purchase behaviour. This finding is consistent with previous studies (Rusyani *et al.*, 2021; Szilagyi *et al.*, 2022), which state that consumers' sustainability values are reflected in their actual purchasing decisions. Purchase intention also has a positive effect on purchase behaviour. Tengli & Srinivasan (2022) demonstrate that stronger purchase intention significantly influences actual consumer purchases. This is in line with Nagar & Verma (2025), who show that purchase intention serves as a primary predictor of consumer purchase behaviour. Based on these issues, this study aims to examine the effects of product knowledge and environmental concern on the purchase behavior of green skincare products, positioning purchase intention as a mediating variable to clarify the underlying mechanism linking these constructs. The findings are expected to provide empirical insights into the persistent gap between pro-environmental attitudes and actual purchasing behavior, particularly within the context of environmentally friendly skincare products.

2. Literature Review

2.1 Theoretical and Conceptual Background

This study is grounded in the Theory of Planned Behavior (TPB), which posits that individual behaviour is directly influenced by behavioural intention. According to Ajzen (1991) Intention get shaped by individuals attitude toward behavior, the social expectations they sense, and their own feeling of power regarding the action, explaining why the Theory of Planned Behavior is frequently employed for predicting planned deeds. TPB has been extensively applied to explain how intention leads to actual purchasing behaviour, particularly for environmentally friendly products (Ngo *et al.*, 2025). Empirical studies using TPB demonstrate that intention is most proximal predictor of actua behavior in green contexts, with attitudes, subjective norms, and perceived behavioral control significantly influencing consumers' intention to purchase environmentally friendly products (Ogiemwonyi *et al.*, 2023). In addition, extensions of TPB that incorporate environmental concern and product knowledge have been shown to improve the explanatory power of the model in predicting green purchase intentions and behaviours of consumers (Ruiz-Molina *et al.*, 2025).

2.2 Product Knowledge

Product knowledge indicates how clearly customers understand the attributes of beauty goods and their impacts on health and environment (Testa *et al.*, 2024). Product knowledge covers knowing a good's characteristics, its outcomes post-use, and its value in meeting customer needs, implying that consumers with more product knowledge usually make better evaluations about environmentally friendly skin care (Zane *et al.*, 2024). Knowing the ingredients, how things are made, and claims about the environment can change how people judge both the standard and security of an item (Wang *et al.*, 2021). Product knowledge can be seen in two primary types, factual knowledge and personal knowledge. Factual knowledge refers to the amount of real information that consumers possess regarding the features, ingredients, and qualities of a product (Wang *et al.*, 2021). Product knowledge relates to how much individuals believe they understand about the product (Menozzi *et al.*, 2023). Product knowledge can also be seen in how consumers have interacted with the product and how well they know it, which affects their capability to comprehend and assess the product more effectively (Lichtenstern *et al.*, 2024).

2.3 Environmental Concern

Environmental concern refers to the degree of individual awareness and sensitivity toward environmental issues (Testa *et al.*, 2024) which shapes how consumers select, evaluate, and use environmentally friendly skincare products. It reflects not only the extent of individuals' concern about environmental problems but also a responsibility to join projects that help keep the environment safe

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(Ebaidalla *et al.*, 2025). Consumers with higher levels of environmental concern are more likely to perceive purchasing decisions as part of their personal responsibility toward sustainability (Dutta & Hwang, 2021). Environmental concern in this study is understood as individual concern for the environment as reflected in attitudes toward the consumption of green skincare products (Dhir *et al.*, 2021; Moslehpour *et al.*, 2023). Referring to Tang *et al.* (2022) cognitive–affective–conative attitude structure model, environmental concern is operationalized through three components, namely environmental knowledge/awareness (cognitive), preference for environmentally friendly attributes (affective), and environmentally friendly behavioral tendencies (conative).

2.4 Purchase Intention

Purchase intention refers to consumers' tendency or willingness to purchase green skincare products in the future (Testa *et al.*, 2024). It reflects an individual's readiness to engage in purchasing behavior, indicating the extent of their interest in and evaluation of a product and its quality (Singh *et al.*, 2024). In the context of environmentally friendly products, purchase intention is commonly shaped by perceived value, trust in environmental claims, and the alignment of the product with consumers' personal preferences (Zhuo *et al.*, 2022). Nevertheless, a strong intention does not necessarily translate into actual purchasing behavior, as situational and evaluative barriers may hinder its realization. Intentions are formed from three main factors, namely attitude toward behavior, subjective norms (perceived social pressure), and perceived behavioral control (perception of the ease or difficulty of performing the behavior) (Narsis, 2023). Liu (2021) further suggests that purchase intention can be reflected in several dimensions, indicating consumers' level of interest and readiness toward a product, including interest in seeking information, desire to know more, interest in trying, consideration to buy, and desire to use.

2.5 Purchase Behavior

Purchase behavior show how consumers genuinely behave when getting green skincare items (Mamun *et al.*, 2020). Regarding environmentally friendly products, purchase behavior act as an important gauge because they expose how much customer preference and intent become real purchasing decision (J. Wang *et al.*, 2021). Purchase behavior is the conduct that demonstrates what consumers truly purchase about green skincare goods (Nagar & Verma, 2025). Purchase behavior in this study was measured based on the stages of the consumer decision process in the Engel–Kollat–Blackwell (EKB) model, which includes problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase (El Gozmir *et al.*, 2024). Behavioral intention is formed from three main factors, namely attitude toward behavior, subjective norms, and perceived behavioral control, which together influence the formation of an individual's intention to perform an action to keep the environment safe (Nickell & Hinsz, 2023).

Product knowledge is a cognitive factor that helps consumers understand the characteristics and benefits of a product. This understanding increases consumer confidence in evaluating purchase options, thereby encouraging purchase intention. Several studies (Jafar *et al.*, 2023; Patak *et al.*, 2021; S. Wang *et al.*, 2020) found that product knowledge has a positive and significant effect on purchase intention. Therefore, it can be assumed that the higher the product knowledge possessed by consumers, the greater the tendency for purchase intention to form. Thus, the first hypothesis is that product knowledge has a positive and significant effect on purchase intention. Environmental concern reflects the level of consumer awareness of the environmental impact of their consumption activities. This awareness encourages consumers to be more selective in choosing products that are considered more environmentally friendly, thereby forming purchase intention. Findings from previous research (Dutta & Hwang, 2021; Moslehpour *et al.*, 2023) show that environmental concern has a positive and significant effect on purchase intention. Thus, environmental concern is expected to contribute to the formation of purchase intention. Therefore, the second hypothesis states that environmental concern has a positive and significant effect on purchase intention. Product knowledge also influences how consumers evaluate and make purchasing decisions. Consumers who have a better understanding of the product tend to be more confident in making purchasing decisions. Several previous studies (Davis & Dabas, 2021; Ezeobi *et al.*, 2025) found that

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product knowledge has a positive and significant influence on purchase behavior. Therefore, product knowledge is expected to have a direct influence on purchase behavior, leading to the third hypothesis that product knowledge has a positive and significant effect on purchase behavior. Similarly, environmental concern can encourage consumers to act in accordance with their pro-environmental values. Consumers who care about the environment are more likely to translate their preferences into actual purchasing actions. Previous research (Rusyani *et al.*, 2021; Szilagy *et al.*, 2022) indicates that environmental concern has a positive and significant effect on purchase behavior. Thus, environmental concern is expected to influence purchase behavior. The fourth hypothesis proposes that environmental concern has a positive and significant effect on purchase behavior. Purchase intention reflects consumers' readiness to purchase a product. When this intention is strong, consumers tend to realize it in the form of actual purchasing behavior. This is consistent with findings that purchase intention has a positive and significant influence on purchase behavior (Kim & Lee, 2023; Ngo *et al.*, 2025). Therefore, purchase intention is expected to have a positive effect on purchase behavior, as stated in the fifth hypothesis. Regarding the mediating role, product knowledge increases confidence and positive attitudes toward green skincare, which in turn increases purchase intention and ultimately results in actual purchase behavior. Findings (Tengli & Srinivasan, 2022; Nagar & Verma, 2025) show that purchase intention acts as a mediating variable in the relationship between product knowledge and purchase behavior. Thus, the sixth hypothesis states that purchase intention mediates the effect of product knowledge on purchase behavior. Likewise, environmental concern encourages the formation of purchase intention for environmentally friendly products, which is then translated into actual purchasing behavior. Purchase intention serves as the main mechanism that explains how consumers' values and concern for the environment can be translated into purchasing behavior (Mamun *et al.*, 2020; Nguyễn *et al.*, 2025; Vania & Ruslim, 2023). Therefore, the seventh hypothesis proposes that purchase intention mediates the effect of environmental concern on purchase behavior. Based on the theoretical framework and the proposed hypotheses, the relationships among the variables in this study are illustrated in the conceptual framework shown in Figure 1.

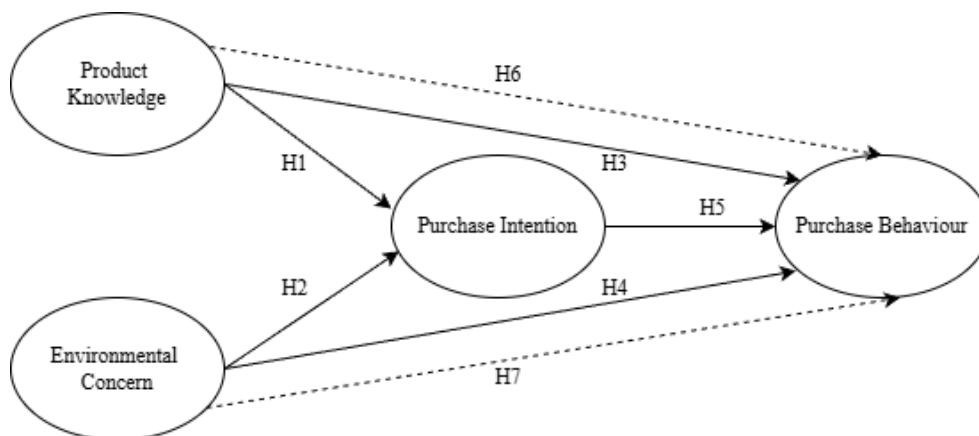


Figure 1. Conceptual Framework

3. Research Methodology

This study employs a quantitative method with an explanatory approach to objectively examine the effects of product knowledge, environmental concern, purchase intention, and purchase behaviour by utilizing numerical data and statistical analysis techniques for hypothesis testing (Hair *et al.*, 2019). A non-probability sampling technique was applied, specifically purposive sampling (Ahmed, 2024). The population of this study consists of skincare users in the city of Semarang. Respondents were selected based on specific criteria aligned with the research objectives. The criteria included: (1) male or female

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consumers aged 18–35 years; (2) residents of Semarang; (3) individuals who had purchased or used skincare products at least once within the past six months; and (4) those who were aware of or had been exposed to information regarding green skincare products. The sample size was determined using the rule-of-thumb approach, which suggests that an adequate sample for quantitative research typically ranges between 100 and 200 respondents (Hair *et al.*, 2019). Accordingly, this study involved 180 respondents. This number was considered sufficient to ensure representativeness and to support the statistical analyses employed (Guenther *et al.*, 2023; J. F. Hair *et al.*, 2021). The research questionnaire was distributed online through Google Forms from November 2025 to January 2026. Data processing in this study was carried out in stages using the Partial Least Squares–Structural Equation Modeling (PLS-SEM) method with the help of SmartPLS 4 software to analyze the relationships between latent variables simultaneously. The research model was evaluated in two stages, namely measurement model evaluation and structural model evaluation. The measurement model evaluation in this study included validity and reliability tests, as well as bootstrapping for hypothesis testing.

4. Results and Discussion

4.1 Results

4.1.1 Respondent Characteristic

This study was dominated by female respondents (73.89%), while males accounted for 26.11%. The majority of respondents were aged 17–25 years (91.67%), so the study largely represented young adults. Most respondents were bachelor's degree graduates (63.33%). Respondents were also predominantly students or university students, accounting for 80%. The majority of respondents' income was in the category below IDR 1,500,000 (31%), indicating that most respondents had relatively low income levels.

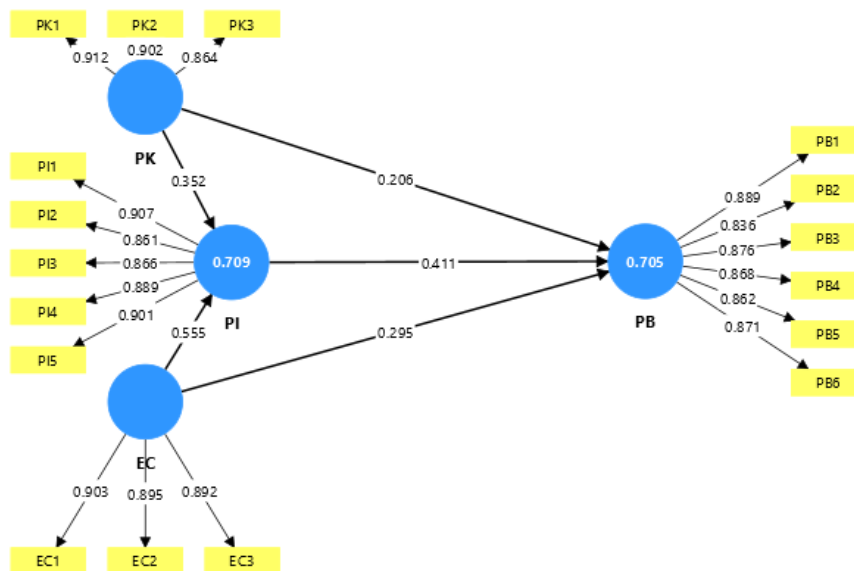


Figure 1. Outer Loading

Based on the results of testing the measurement model through outer loading values, all indicators in this study have values above 0.70. This shows that each indicator has a strong correlation with the latent construct being measured. An outer loading value ≥ 0.70 indicates that convergent validity is met (Hair & Alamer, 2022; Savitri *et al.*, 2021). Therefore, all indicators in this study are declared valid and do not require indicator deletion.

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Table 1. AVE, Cronbach's Alpha and Composite Reliability

Variable	Indicator	Outer Loadings	AVE	Cronbach's alpha	Composite reliability
Product Knowledge	PK1	0.912	0.797	0.873	0.881
	PK2	0.902			
	PK3	0.864			
Environmental Concern	EC1	0.903	0.804	0.878	0.882
	EC2	0.895			
	EC3	0.892			
Purchase Intention	PI1	0.907	0.783	0.931	0.931
	PI2	0.861			
	PI3	0.866			
	PI4	0.889			
	PI5	0.901			
Purchase Behavior	PB1	0.889	0.752	0.934	0.935
	PB2	0.836			
	PB3	0.876			
	PB4	0.868			
	PB5	0.862			
	PB6	0.871			

The AVE values for Environmental Concern (0.804), Product Knowledge (0.797), Purchase Behaviour (0.752), and Purchase Intention (0.783) exceeded the recommended threshold of 0.50, further confirming convergent validity (Savitri *et al.*, 2021). Reliability testing showed that Cronbach's Alpha and Composite Reliability values for all constructs were above 0.70, indicating satisfactory internal consistency.

Table 2. Heterotrait-Monotrait Ratio (HTMT)

Variable	EC	PK	PB	PI
Environmental Concern				
Product Knowledge	0.799			
Purchase Behavior	0.848	0.795		
Purchase Intention	0.887	0.821	0.857	

Based on the criteria recommended by Hair & Alamer (2022), an HTMT value below 0.90 is still acceptable, especially when there is conceptual proximity between constructs. The test results show that all HTMT values are below the specified threshold, so it can be concluded that each construct in the model has adequate discriminant validity.

4.1.2 Hypothesis Test

To assess the contribution of each construct to the endogenous variable, the effect size (f^2) results show that environmental concern has a significant influence on purchase intention ($f^2 = 0.527$), while product knowledge has a moderate influence on purchase intention ($f^2 = 0.211$). Regarding purchase behavior, purchase intention has a moderate effect ($f^2 = 0.166$), while product knowledge ($f^2 = 0.059$) and environmental concern ($f^2 = 0.096$) only have a small effect. Based on the criteria of f^2 values of 0.02 (small), 0.15 (moderate), and 0.35 (large) (Hair & Alamer, 2022), these findings indicate that

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environmental concern is the largest contributor in shaping purchase intention, while purchase intention is the main factor that drives actual purchasing behavior.

Table 3. Effect Size (F^2)

Variable	Purchase Intention	Purchase Behavior
Purchase Behavior		
Purchase Intention		0.166
Product Knowledge	0.211	0.059
Environmental Concern	0.527	0.096

Table 6. Path Coefficient

Variable	Path Coefficient	T statistics	P values	Result
Product Knowledge -> Purchase Intention	0.352	4.777	0.000	Accepted
Environmental Concern -> Purchase Intention	0.555	7.925	0.000	Accepted
Product Knowledge -> Purchase Behavior	0.206	1.917	0.055	Rejected
Environmental Concern -> Purchase Behavior	0.295	3.027	0.002	Accepted
Purchase Intention -> Purchase Behavior	0.411	3.504	0.000	Accepted
Environmental Concern -> Purchase Intention -> Purchase Behavior	0.228	3.212	0.001	Accepted
Product Knowledge -> Purchase Intention -> Purchase Behavior	0.144	2.78	0.005	Accepted

Path coefficient analysis was conducted to test the relationship between variables in the research model using the bootstrapping procedure (Hair *et al.*, 2021; Savitri *et al.*, 2021). The results showed that Product Knowledge had a positive and significant effect on Purchase Intention ($\beta = 0.352$; $p < 0.001$), while Environmental Concern had a stronger positive effect on Purchase Intention ($\beta = 0.555$; $p < 0.001$). Regarding Purchase Behavior, Purchase Intention was proven to have a positive and significant effect ($\beta = 0.411$; $p < 0.001$), and Environmental Concern also had a significant direct effect ($\beta = 0.228$; $p = 0.001$). However, there was no significant effect of Product Knowledge on Purchase Behavior ($\beta = 0.206$; $p = 0.055$). The mediation test results showed that Purchase Intention fully mediated the relationship between Product Knowledge and Purchase Behavior, and partially mediated the relationship between Environmental Concern and Purchase Behavior.

4.2 Discussion

The results of hypothesis testing indicate that Product Knowledge plays an important role in shaping Purchase Intention; therefore, Hypothesis 1 is supported. This finding suggests that when consumers have a strong understanding of green skincare products such as their ingredients, benefits, and eco-friendly claims, they are more likely to develop purchase intention. This result is consistent with previous studies identifying product knowledge as a key determinant of purchase intention (Jafar *et al.*, 2023; Patak *et al.*, 2021; S. Wang *et al.*, 2020). However, some prior research reported that product knowledge does not significantly affect purchase intention (Shen & Chen, 2020). Thus, this study helps clarify inconsistencies in earlier findings regarding the role of consumer knowledge in shaping purchase intention. Environmental concern was also found to have a significant effect on purchase intention and emerged as the strongest predictor of intention, thereby supporting Hypothesis 2. In other words, the greater consumers' concern for environmental issues, the stronger their tendency to choose products perceived as environmentally responsible. These results confirm that environmental awareness and values are central drivers in forming sustainable consumption intentions.

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The findings are consistent with previous research showing that environmental concern plays a significant role in shaping purchase intention (Dutta & Hwang, 2021; Moslehpour *et al.*, 2023). Although some studies have reported insignificant effects (Ebaidalla *et al.*, 2025; Kumar *et al.*, 2022), the results of this study indicate that, in the context of local green skincare, environmental concern remains a primary determinant of purchase intention. Product knowledge did not show a significant direct effect on purchase behavior, leading to the rejection of Hypothesis 3. While earlier studies found that product knowledge directly influences purchasing behavior (Davis & Dabas, 2021; Ezeobi *et al.*, 2025), the present findings suggest that product knowledge plays a more substantial role in the intention-formation stage. This indicates that consumer knowledge alone is insufficient to directly stimulate purchasing behavior without the support of psychological mechanisms such as purchase intention. Conversely, environmental concern was found to have a significant effect on purchase behavior, thus supporting Hypothesis 4. This suggests that environmental concern not only shapes intention but can also directly motivate purchasing actions. Consumers with high environmental concern tend to be more consistent in applying sustainability values in their consumption behavior. These findings support previous research demonstrating that environmental concern plays an important role in influencing purchase behavior (Rusyani *et al.*, 2021; Szilagyi *et al.*, 2022). Furthermore, purchase intention was found to have a significant effect on purchase behavior, confirming Hypothesis 5. The stronger the consumer's intention to purchase green skincare products, the greater the likelihood that this intention will be translated into actual purchasing behavior. This finding aligns with previous studies identifying purchase intention as a primary predictor of purchase behavior (Kim & Lee, 2023; Ngo *et al.*, 2025). Although some research suggests that purchase intention does not always lead to actual behavior (Tawde *et al.*, 2023), the results of this study demonstrate that, in the context of local green skincare, consumers' intentions can be realized in actual purchasing actions. This may indicate that contextual factors, such as the relevance of environmental issues and consumer engagement with green skincare products, strengthen the relationship between intention and behavior. The mediation analysis further shows that purchase intention fully mediates the relationship between product knowledge and purchase behavior, thereby supporting Hypothesis 6. This means that the effect of product knowledge on purchasing behavior operates indirectly through the formation of purchase intention. These findings are consistent with previous studies (Nagar & Verma, 2025; Tengli & Srinivasan, 2022), suggesting that product knowledge functions primarily as a cognitive driver that requires motivational reinforcement before leading to actual behavior. Meanwhile, purchase intention partially mediates the relationship between environmental concern and purchase behavior, supporting Hypothesis 7. Environmental concern is capable of influencing purchasing behavior both directly and indirectly through purchase intention. This pattern is consistent with previous findings showing that environmental concern shapes purchase intention, which subsequently affects purchase behavior (Nguyễn *et al.*, 2025; Vania & Ruslim, 2023). Overall, these findings confirm that Purchase Intention serves as a key psychological mechanism that bridges cognitive factors and environmental values with green skincare purchasing behavior.

5. Conclusion

The primary contribution of this study lies in highlighting the central role of purchase intention as a mechanism that links cognitive factors (product knowledge) and affective factors (environmental concern) to actual purchasing behaviour in the context of local green skincare products. The findings extend the sustainable consumer behaviour literature by demonstrating that environmental concern exerts both direct and indirect effects on purchase behaviour. In contrast, product knowledge primarily functions as a driver of intention rather than immediate action. This study therefore provides further insight into how the attitude–intention–behaviour gap can be understood within the consumption of environmentally friendly beauty products in developing country contexts.

Future research is encouraged to refine the proposed model by incorporating additional contextual variables, such as perceived price, social influence, or trust in environmental claims, to obtain a more

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comprehensive understanding of the determinants of green skincare purchase behaviour. Longitudinal or experimental research designs may also offer deeper insights into behavioural changes over time. Moreover, extending the investigation to other categories of green products would allow for testing the robustness of the model across different consumption contexts.

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